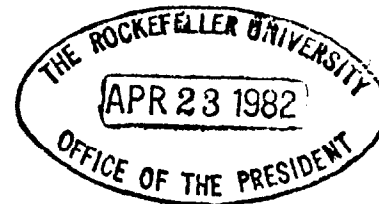


S. Schmeizer

copy

April 20, 1982



Dr. Joshua Lederberg
President
The Rockefeller University
1230 York Avenue
New York, New York 10021

Dear Dr. Lederberg:

I was very pleased to hear that you enjoyed our MMFQ paper. Since I retired from the NIH early last year, the amount of additional help which I can offer at this time is limited. I assume that the "theme" which interests you is the eventual use of the findings of basic research in clinical care. Often, this is examined in terms of the cost-benefits of fundamental research. The following comments may be useful to you.

1. Our paper was based on work that was done by the Public Services Laboratory of Georgetown University under a contract with the NIH, which was directed out of my office, Selma Mushkin was the director of PSL and the guiding light of the group working on the contract. Her book on the costs and benefits of biomedical research was a product of that contract, and I understand that Bill Copeland has already sent you a copy. For a summary of previous work in the area, I would call your attention to Chapter 1, in particular, and to the bibliography for that chapter. Unfortunately, Dr. Mushkin died shortly before the book was published, and Georgetown University found itself unable to continue support for PSL without her leadership. However, Frank Sandifer, who was Dr. Mushkin's assistant, tells me that the book contains the full bibliography which was developed on the cost-benefit question.
2. Hugh Fudenberg has published a few papers in this area which was not referenced in Mushkin's book. These are summarized in Fudenberg, H.H. and Melnick, V.L., Biomedical Scientists and Public Policy, 1978, Plenum, New York, Chapter 3, Informing the Public: Fiscal Returns of Biomedical Research.
3. On the more general question of the relation between fundamental research and the development of technology, I can identify several studies. The classical report, of course, is the TRACES study, Technology in Retrospect and Critical Events in Science which was done by the Illinois Institute of Technology Research Institute for the National Science Foundation, December 15, 1968. Another such study, also sponsored by the NSF, was prepared by the Battelle Institute: Interactions of Science and Technology in the Innovative Process, March 19, 1973. Both of these studies, although they include examples in the biomedical area, cover a broad range of scientific development. More recently, the Battelle/Columbus Laboratories (505 King Avenue, Columbus, Ohio 43201) have produced a number of reports under the sponsorship of various organizations in the then DHEW. I am aware of three such studies:

MMFQ Milbank Quarterly

- Analyses of Selected Biomedical Research Programs, Final Report to the President's Biomedical Research Panel, January 31, 1976 (2 Vols.)
- Further Analyses of the Characteristics of Research Resulting in Clinical Advances from Inception to Clinical Usage. Final Report to the NIH. February 28, 1977.
- An Assessment of the Role of Research Involving Living Human Fetuses in Advancements in Medical Science and Technology, Revised Final Report to National Commission for the Protection of Human Subjects, DHEW, March 28, 1975.

If you have difficulty in finding copies of any of these materials, it is possible that Dr. Helen Gee, who is Chief of the Program Evaluation Branch in the Division which I directed, may be able to be of help. I understand that you are acquainted with Dr. Gee.

4. On related, but somewhat different levels, let me mention two other items which may be of interest to you.
 - The National Cancer Institute has sponsored an interesting report on the feedback from clinical medicine to fundamental research: Swazey, J.P. and Reeds, K. Today's Medicine, Tomorrow's Science-- Essays on Paths of Discovery in the Biomedical Sciences. DHEW Pub. No. (NIH) 78-244.
 - About ten years ago, the Office of Program Planning and Evaluation of NIH sponsored a conference on the Diffusion of Medical Innovation at Cornell University. The proceedings of this conference was published as: Gordon, G. and Fisher, G.L., The Diffusion of Medical Technology: Policy and Planning Perspectives, Cambridge, Mass., Ballinger, 1975.
5. Finally, you asked about possible bibliographic help from NLM. I have discussed your interest with Dr. Henry Riecken, Associate Director for Planning at the Library. If you wish to communicate with him directly in formulating a request, they may be able to help.

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I certainly agree with you on the need for unflagging support for fundamental research. A good deal of my effort in my years in OD/NIH was devoted to just this issue. I hope that this material will be of some help to you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sol Schneyer', with a long horizontal stroke extending to the right.

Solomon Schneyer

cc: Dr. Riecken
Dr. Gee

Home Address:
203 Hillsboro Drive
Silver Spring, MD 20902